

REMARKS/ARGUMENTS

Summary of the Office Action

Claims 1-9, 11, and 13-17 are pending.

Claims 1, 3, and 16 were rejected under 35 U.S.C. § 103(a) as being obvious over Hasegawa et al. U.S. Patent No. 5,191,431 (hereinafter "Hasegawa") in view of Craft et al. U.S. Patent No. 5,557,551 (hereinafter "Craft").

Claims 2 and 4 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hasegawa and Craft in view of Ando U.S. Patent No. 6,104,389 (hereinafter "Ando").

Claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Hasegawa and Craft in view of Kadnier U.S. Patent No. 6,097,520 (hereinafter "Kadnier").

Claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Hasegawa and Craft in view of Kamatani U.S. Patent No. 5,982,723 (hereinafter "Kamatani"). Claims 7 and 8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hasegawa and Craft and further in view of Lipasti U.S. Patent No. 6,487,640 (hereinafter "Lipasti").

Claims 9 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Dinan et al. U.S. Patent No. 4,888,812 (hereinafter "Dinan") and Rabin U.S. Patent No. 5,159,336 (hereinafter "Rabin") in view of Fallon U.S. Patent No. 6,601,104 (hereinafter "Fallon").

Claim 11 was rejected under 35 U.S.C. as being unpatentable over Kamatani in view of Craft.

Claim 13 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Kamatani and Craft in view of Kulakowski Publication No. 0587437 (hereinafter "Kulakowski").

Claims 14 and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kamatani and Craft in view of Lipasti.

Summary of Applicants' Amendments

Applicants have amended claim 11 solely in order to expedite prosecution.

Applicants have added new claim 18 in order to more particularly point out and distinctly claim the subject matter that applicants regard as the invention.

The Examiner's rejections are respectfully traversed. Applicants reserve the right to pursue subject matter lost by any of the amendments in a continuation or divisional application.

Applicant's Reply to the 35 U.S.C. § 103(a) Rejections

Claim 1

Claims 1 and 3 were rejected under 35 U.S.C. § 103(a) as being obvious over Hasegawa in view of Craft.

Applicants' invention, as defined by claim 1, includes tracking the throughput of a data processing system to determine if a compression rate provides a throughput that meets a predetermined throughput. When the tracked throughput does not meet a predetermined throughput, a second compression routine is used to increase the throughput of the data processing system.

Hasegawa discusses a video recording unit that records video in one of two modes. Hasegawa determines which mode to use by monitoring the magnitude of distortion in a picture and determining if the distortion is above a distortion threshold.

Craft discusses a circuit that determines the thermal load caused by the operation of a circuit. When the thermal load exceeds a thermal range of the circuit, the thermal load is reduced. The thermal load is reduced by, for example, stopping data processing.

The Examiner stated that Hasegawa discloses:

"units for a mode changeover, and a unit for tracking control ... which is equivalent of ... tracking throughput of the data processing system."
(Office Action, page 2).

Hasegawa does not show or suggest tracking the throughput of a data processing system. Hasegawa merely monitors the magnitude of the distortion in a picture and determines if the distortion is above a distortion threshold.

Monitoring the magnitude of the distortion in a picture is not tracking the throughput of a data processing system.

Neither Hasegawa nor Craft, used either alone or in combination, shows or suggests tracking the throughput of a data processing system. For at least this reason, applicants respectfully request that the Examiner's rejection of claim 1, and any claims dependent therefrom, under 35 U.S.C. § 103(a) be withdrawn.

Furthermore, the Examiner stated that Hasegawa does not disclose:

"compressing data using a second compression rate greater than the first compression rate to increase the throughput of the data processing system to at least the predetermined throughput level."
(Office Action, page 3)

To correct this deficiency, the Examiner stated:

"[In] Craft ... if a received value is less than a predefined value, the number of clock cycles are being supported to accelerate ratio of compensation which is equivalent of tracked throughput not meeting the predetermined throughput threshold ... [and] if the received value is more than the predetermined value of the clock cycle, it is prohibited for compensation."
(Office Action, page 3)

Craft does no such thing. Craft merely inhibits the operation of circuitry so that the circuitry has time to cool when the circuitry overheats. In fact, Craft does not even discuss two compression routines. Craft merely inhibits the operation of a single routine if the routine causes circuitry to

overheat. As such, Craft does not show or suggest compressing data using a second compression routine to provide a second compression rate when the tracked throughput does not meet the predetermined throughput threshold as defined by applicants' invention of claim 1.

As shown above, the devices of Craft and Hasegawa are so far removed from each other that Craft and Hasegawa could not be combined in any way, shape, or form. One would not even know where to start. Any combination is merely hindsight reconstruction and completely eviscerates the spirit of both the Craft and Hasegawa devices.

Claim 16

Claims 16 was rejected under 35 U.S.C. § 103(a) as being obvious over Hasegawa in view of Craft.

As shown above, claim 1 is patentable. Claim 16 includes patentable features similar to those argued above in connection with claim 1.

In light of the foregoing, applicants respectfully submit that claim 16 is patentable and request that the Examiner's rejection of claim 16, and any claims dependent therefrom, under 35 U.S.C. § 103(a) be withdrawn.

Claim 9

Claims 9 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Dinan and Rabin in view of Fallon.

The Examiner stated that:

"Dinan does not disclose that of receiving data stream at speed which is greater than the storage rate, compressing data at desired compression rate resulting in increased storage device and storing data and scenario for storing data compression rate with data transmission rate and the compression rate is at least equal to the ratio of the input data transmission rate to the data storage rate so as to provide continuous storage of the input data stream at the input data transmission rate and decomposition."
(Office Action, page 7)

To correct the deficiency in Dinan, the Examiner stated that Hasegawa discloses:

"units for a mode changeover, and a unit for tracking control ... which is equivalent of ... tracking throughput of the data processing system."
(Office Action, page 7).

To correct the deficiency in Dinan, the Examiner also stated that:

"[In] Craft ... if a received value is less than a predefined value, the number of clock cycles are being supported to accelerate ratio of compensation which is equivalent of tracked throughput not meeting the predetermined throughput threshold ... [and] if the received value is more than the predetermined value of the clock cycle, it is prohibited for compensation."
(Office Action, page 3)"

Neither Hawegawa nor Craft were included in the Examiner's initial statement of rejection on page 6 of the Office Action. If the Examiner includes Hawegawa and Craft to

form a five-reference rejection of claim 9 in view of Hawegawa, Craft, Dinan, Fallon, and Rabin, applicants respectfully submit that Hawegawa and Craft - and any resultant combination - do not show particular features for the same reasons mentioned in connection with applicants arguments for the patentability of claim 1.

To correct the deficiency in Dinan, the Examiner also stated that:

"Rabin discloses that memory bandwidth can be controlled by modifying compression ratio"
(Office Action, page 8).

To correct the deficiency in Dinan, the Examiner also stated that:

"Fallon discloses that compressing the digital data stream that compression rate is at least equal to the ratio of the input data transmission rate to the data storage rate so as to provide continuous storage of the input digital data stream at the input data transmission rate."
(Office Action, pages 8 and 9).

The Examiner has clearly stitched together a Frankenstein's monster of a rejection under 35 U.S.C. § 103(a). Regardless, none of the references, used either alone or in combination, discloses tracking an amount of pending access requests to the storage device to determine if the first compression rate provides a throughput that meets a predetermined throughput threshold as configured in applicants' invention of claim 9. For at least this reason, applicants

respectfully request that the Examiner's rejection of claim 9, and any claims dependent therefrom, under 35 U.S.C. § 103(a) be withdrawn.

Claim 17

Claims 17 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Dinan and Rabin in view of Fallon.

As shown above, claim 9 is patentable. Claim 17 includes patentable features similar to those argued above in connection with claim 9.

In light of the foregoing, applicants respectfully submit that claim 16 is patentable and request that the Examiner's rejection of claim 17, and any claims dependent therefrom, under 35 U.S.C. § 103(a) be withdrawn.

Claim 11

Claim 11 was rejected under 35 U.S.C. as being unpatentable over Kamatani in view of Craft.

The Examiner stated that:

"Kamatani does not disclose the scenario when the controller commands the controller compression engine uses a compression routine providing a faster rate of compression to increase the throughput."
(Office Action, page 9)

To correct this deficiency, the Examiner stated that:

"[In] Craft ... if a received value is less than a predefined value, the number of clock cycles are being supported to accelerate ratio of compensation which is equivalent of tracked throughput not meeting the predetermined throughput threshold ... [and] if the received value is more than the predetermined value of the clock cycle, it is prohibited for compensation."
(Office Action, page 10)"

As shown above, Craft does not discuss, for example, the use of two compression routines as defined by applicants' invention of claim 11. Craft does not even track the throughput of a system - let alone using a compression routine to provide a faster rate of compression so as to increase the throughput included in applicants' invention of claim 11.

Neither Craft nor Kamatani, used either alone or in combination, show or suggest applicants' invention of claim 11 that includes a controller for tracking throughput, a plurality of compression routines that are selectively utilized, and a compression routine utilized to provide a faster rate of compression so as to increase the throughput.

For at least this reason, applicants respectfully request that the Examiner's rejection of claim 11, and any claim dependent therefrom, under 35 U.S.C. § 103(a) be withdrawn.

The Dependent Claims

Claims 2 and 4 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hasegawa and Craft in view of Ando.

Claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Hasegawa and Craft in view of Kadnier. Claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Hasegawa and Craft in view of Kamatani. Claims 7 and 8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hasegawa and Craft and further in view of Lipasti. Claim 13 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Kamatani and Craft in view of Kulakowski. Claims 14 and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kamatani and Craft in view of Lipasti.

As shown above, all of the pending independent claims are patentable. Accordingly, all of the pending dependent claims are patentable for depending from patentable independent claims.

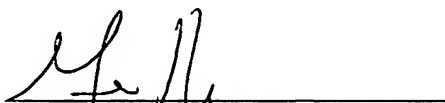
New Claim 18

New claim 18 includes numerous patentable features discussed above. Accordingly, applicants respectfully submit that new claim 18 is patentable.

Conclusion

In light of the foregoing, applicant respectfully submits that this application, including the pending claims, is in condition for allowance. A favorable action is respectfully requested.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'Jeffrey D. Mullen', is written over a horizontal line.

Jeffrey D. Mullen

(Reg. No. 52,056)

Agent for Applicants

☒ Submitted under 37 C.F.R. § 1.34

Fish & Neave IP Group

Ropes & Gray LLP

Customer No. 1473

1251 Avenue of the Americas

New York, NY 10020

(212) 596-9000